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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/538,163	GRANT ET AL.	
	Examiner	Art Unit	
	Hyun Nam	2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,12-16,19,21-26 and 28-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10,12-16,19,21-26 and 28-31* is/are rejected.

7)☒ Claim(s) *6 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/252007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 6 and 26 are objected to because of the following informality:

In claim 6, line 8, "user's" should be --user--.

In claim 26, line 1, "The apparatus" should be 'An apparatus'.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-10, 12-16, 19-26, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by the Kaaresoja et al. (U.S. Patent Number 6,963,762) hereinafter Kaaresoja '762.

Referring to claim 1, Kaaresoja '762 teaches, as claimed, a method, comprising:

receiving an input signal (see Fig. 1, Transceiver 104) associated with an actuation of a user-interface member (see Fig. 1, Keypad 108) on a first handheld communication device (see Column 3, Lines 26-30; Note, this system clearly discusses users of mobile phones where there is minimum of two like-devices that sends and receives tactile information);

determining a haptic code (see Fig. 2, vibration patterns) associated with the actuation (see Fig. 1, data path labeled, 'instruction on how to interpret a tactile sensation pattern');

including the haptic code in an output signal (see Fig. 1, data path labeled, 'control signal' to Vibration motor 100); and

sending the output signal to a remote handheld communication device remote from the first handheld communication device (see Column 3, Lines 62-65; Note, tactile icons composed from one device is sent to another remote device).

As to claim 3, Karresoja '762 teaches, the method of claim 1 further comprising including in the output signal at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Column 3, Line 29), and a graphical feature (pictures, see Column 3, Line 28).

As to claim 4, Karresoja '762 teaches, the method of claim 1 wherein the haptic code is determined based on a predetermined scheme (see Fig. 1, Stored vibration pattern 140e; Note, predetermined vibrations patterns are stored in the memory for later determination of tactile sensation to be sent or received).

As to claim 5, Karresoja '762 teaches, the method of claim 1 wherein the user-interface member includes at least one of a key, a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member listed above).

Referring to claim 6, Kaaresoja '762 teaches, as claimed, a method, comprising:

receiving an input signal (see Fig. 1, Transceiver 104);

outputting a request from a first handheld communication device (see Column 3, Lines 11-13; Note, an user preparing an vibration pattern and making a call to another user), the request relating to a contact by a user or an input device (Note, a call or request for a communication via vibration pattern is made by one user input device on a mobile phone), with a user-interface member (see Fig. 1, Keypad 108) coupled to a second handheld communication device (see Column 3, Lines 62-65; Note, another user is also equipped with same mobile device); and

providing a control signal (see Fig. 1, data path labeled 'control signal) associated with the contact to an actuator (see Fig. Vibration motor 100; Note, a tactile sensation is felt when user is in contact with actuating motor) coupled to the second handheld communication device (see Column 3, Lines 62-65), the control signal (see Fig. 1, data path labeled 'control signal) configured to cause the actuator to output a haptic effect (vibration pattern, see Fig. 1, Memory 140) associated with the input signal (see Fig. 1, Keypad 108) upon a user contacting the user-interface member (see Column 3, Lines, 15-16; Note, a user composes a tactile pattern using Keypad 108 then transmits the tactile pattern to another user with the mobile phone).

As to claim 7, Karresoja '762 teaches, the method of claim 6 further comprising extracting a haptic code (see Fig. 2, vibration patterns) from the input signal (see Column 3, Lines, 15-16; Note, a user composes a tactile pattern using Keypad 108), the control signal (see Fig. 1, data path labeled 'control signal) being based at least in part on the haptic code (Note, the control signal is base on the vibration pattern).

As to claim 8, Karresoja '762 teaches, the method of claim 6 further comprising causing a content of the input signal to be displayed, the content includes at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Column 3, Line 29), and a graphical feature (pictures, see Column 3, Line 28).

As to claim 9, Karresoja '762 teaches, the method of claim 6 wherein the user-interface member includes one of a key, a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member list given above).

As to claims 10 and 12-16, they are directed to a computer-readable medium on which is encoded program code to implement the methods as set forth in claims 1 and 3-9. Therefore, they are rejected on the same basis as set forth hereinabove.

Referring to claim 19, Kaaresoja '762 teaches, as claimed, an apparatus, comprising:

a user-interface member (see Fig. 1, Keypad 101) coupled to a body of a first handheld communication device (see Fig. 1, a Block Diagram of a mobile phone);

a processor (see Fig. 1, Controller 106);

an actuator coupled (see Fig. 1, Vibration motor 100) to the body and in communication with the processor (see Fig. 1, data path labeled 'control signal'); and

a memory (see Fig. 1, Memory 140) in communication with the processor (see Fig. 1, three data paths between Controller 106 and Memory 140), the memory storing program code (see Fig. 1, Vibration pattern interpreter 140a, composer 140b, downloader 140c, and selector 140d) executable by the processor, including:

program code (see Fig. 1, Vibration pattern selector 140d) for receiving an input signal associated with an actuation of the user-interface member (see Fig. 1, Keypad 108);

program code (see Fig. 1, Vibration pattern composer 140a) for determining a haptic code associated with the actuation (Note, determining or composing a tactile icon into a vibration pattern);

program code (see Fig. 1, Vibration pattern interpreter 140a) for including the haptic code in an output signal (see Fig. 1, data path labeled, 'control signal'); and

program code for sending the output signal to a second handheld communication device remote from the first handheld communication device (see Column 3, Lines 62-65; Note, tactile icons composed from one device is sent to another remote device).

Referring to claim 26, Kaaresoja '762 teaches, as claimed, an apparatus, comprising:

a user-interface member (see Fig. 1, Keypad 101) coupled to a body of a handheld communication device (see Fig. 1, a Block Diagram of a mobile phone);

a processor (see Fig. 1, Controller 106);

an actuator (see Fig. 1, Vibration motor 100) coupled to the body and in communication with the processor (see Fig. 1, data path labeled 'control signal'); and

a memory (see Fig. 1, Memory 140) in communication with the processor, the memory storing program code executable by the processor (see Fig. 1, three data paths between Controller 106 and Memory 140), including:

program code (see Fig. 1, Vibration pattern selector 140d) for receiving an input signal (see Fig. 1, Keypad 108);

program code (see Fig. 1, Vibration pattern composer 140a) for outputting a request from the handheld communication device, the request (see Column 3, Lines 11-13; Note, an user preparing an vibration pattern and

making a call to another user) relating to a contact by user or an input device (Note, a call or request for a communication via vibration pattern is made by one user input device on a mobile phone), with the user-interface member (see Fig. 1, Keypad 108); and

program code (see Fig. 1, Vibration pattern interpreter 140a) for providing a control signal (see Fig. 1, data path labeled, 'control signal') associated with the contact to the actuator, the control signal configured to cause the actuator to output a haptic effect associated with the input signal (see Fig. 1, data path labeled, 'tactile sensation patterns).

As to claims 21 and 28, Karresoja '762 teaches, the apparatus of claims 19 and 26 respectively wherein the handheld communication device includes one of a cellular phone (see Fig. 1, a Block Diagram of a Mobile Phone), a satellite phone, a cordless phone, a personal digital assistant, a pager, a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player (Note, the mobile phone is one of the handheld communication device listed above).

As to claims 22 and 29, Karresoja '762 teaches, the apparatus of claims 19 and 26 wherein the user-interface member includes at least one of a key, a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick,

a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member listed above).

As to claims 23, Karresoja '762 teaches, the apparatus of claim 19 wherein the memory further stores program code (see Fig. 1, Stored vibration pattern 140e) for sending the output signal to a remote handheld communication device (see Column 3, Lines 62-65; Note, tactile icons composed from one device is sent to another remote device).

As to claims 25, Karresoja '762 teaches, the apparatus of claim 19 wherein the user-interface member (keys on Keypad, see Fig. 1, Keypad 108) is one of a plurality of user-interface members coupled to the body (see Fig. 1, Keypad 108; Note, a keypad consists of plurality of keys), the memory further storing a plurality of haptic codes (see Fig. 2, vibration patterns), each associated with one of the plurality of user-interface members according to a predetermined scheme (tactile icons, see Column 3, Lines 14-15).

As to claims 30, Karresoja '762 teaches, the apparatus of claim 26 wherein the memory further stores program code (see Fig. 1, Vibration pattern interpreter 140a) for extracting a haptic code (see Fig. 2, Vibration patterns) from the input signal, the control signal (see Fig. 1, data path labeled 'control signal') being based at least in part on the haptic code (Note, a control signal to a Vibration motor is based on Vibration patterns generated or stored in the memory).

As to claims 24 and 31, Karresoja '762 teaches, the apparatus of claims 19 and 26 respectively further comprising a display device (see Fig. 1, Display 110) in communication with the processor (see Fig. 1, Controller 106), the memory (see Fig. 1, Memory 140) further storing program code for causing a content of the input signal to be displayed, the content includes at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Column 3, Line 29), and a graphical feature (pictures, see Column 3, Line 28).

Response to Arguments

Applicant's arguments filed 06/21/07 have been fully considered but they are not deemed to be persuasive.

Regarding the 101 rejection under 35 U.S.C. 101, Applicant's response, amendments, and cancellations has overcome the rejection.

Regarding the 35 U.S.C. §112, second paragraph problems, Applicant's response, amendments, and cancellations has overcome these rejections.

Applicant argues that none of the cited references include the limitations of sending the output signal to a second remote device, where the output signal

includes a haptic code associated with an actuation of a user-interface member on a first device.

Examiner disagrees. Karresoja '762 and Wanderlich (U.S. Patent Number 6,028,531) hereinafter Wanderlich '531 does teaches one device sending an output signal to another device where the coded signal turns into a tactile sensation for end users (see Karresoja '762, Column 3, Lines 11-15 and 26-30; Note, no reference to Wanderlich is given since above Final Action is based on Karresoja '762).

Applicant further argues, as claimed, the input signal is associated with an actuation of a user-interface member of the first device. None of the cited references disclose or suggest a hepatic code associated with the actuation of the user-interface member, which is then included in an output signal and sent to a second, remote device.

Examiner disagrees. Karresoja '762 does disclose and suggest a hepatic code associated with the actuation of the user-interface member, which is then included in an output signal and sent to a second, remote device. Karresoja '762 discloses plurality of users each using a mobile phone to communicate tactile information to each other (see Karresoja '762, Column 3, Lines 11-15 and 26-30; Note, no reference to Wanderlich is given since above Final Action is based on Karresoja '762).

Conclusion

The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure:

Wanderlich (U.S. Patent 6,028,531) discloses terminal units for a mobile communications system; and

Fernandez (U.S. Patent 4,851,820) discloses paging device having a switch actuated signal strength detector.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun Nam whose telephone number is (571) 270-1725. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HENRY TSAI
SUPERVISORY PATENT EXAMINER

9/4/07